

Appl. No. 09/831,480 Atty. Docket No. 7368 Amdt. dated December 15, 2003 Reply to Office Action of June 18, 2003

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-28 (Previously Cancelled)

Claims 29-85 (Currently Cancelled)

- Claim 86. (Currently Amended) A cleaning implement, comprising:
 - a handle;
 - a support head pivotally attached to said handle;
 - a disposable cleaning substrate removeably attached to the support head, wherein said disposable cleaning substrate has an a t1200 absorbent capacity of at least about 5 g/g; and a liquid delivery system for providing a cleaning liquid to a surface to be cleaned on an area in front of said support head, wherein said liquid delivery system is configured to spray dispense at least about 2 mils/sec of a cleaning liquid.
- Claim 87. (Previously Submitted) The cleaning implement of claim 86, wherein said liquid delivery system is configured to spray the cleaning liquid onto a surface with a spray efficiency of at least about 0.000006 mils/(sec x cm2 x g/g).
- Claim 88. (Previously Submitted) The cleaning implement of claim 86, wherein said cleaning substrate has a squeeze-out value of no more than about 40%.
- Claim 89. (Previously Submitted) The cleaning implement of claim 88, wherein said liquid delivery system is configured to spray the cleaning fluid on to a surface with a cleaning efficiency of at least about 0.0006 mils/(sec x cm2 x unit squeeze-out).
- Claim 90. (Previously Submitted) The cleaning implement of claim 86, wherein the liquid delivery system is configured to spray the liquid onto a surface with a spray efficiency of at least about $0.0002 \text{ mils/(sec x cm}^2)$.
- Claim 91. (Previously Submitted) The cleaning implement of claim 86, wherein the liquid delivery system comprises a spray nozzle, a pump in fluid communication with said spray nozzle, an electric motor driving said pump, a voltage source powering said motor, and a liquid filled canister in fluid communication with said pump.



Appl. No. 09/831,480 Atty. Docket No. 7368 Arndt. dated December 15, 2003 Reply to Office Action of June 18, 2003

- Claim 92. (Previously Submitted) The cleaning implement of claim 91, wherein the spray nozzle is configured to provide a spray angle of at least about 30 degrees.
- Claim 93. (Previously Submitted) The cleaning implement of claim 92, wherein the said spray nozzle is configured to provide an average particle size of at least about 100 µm.
- Claim 94. (Previously Submitted) The cleaning implement of claim 91, wherein said spray nozzle is configured to provide an exit velocity of at least about 0.009 cm/sec.
- Claim 95. (Previously Submitted) The cleaning implement of claim 91, wherein said voltage source is a plurality of batteries and wherein said batteries are configured to provide a voltage of at least about 1.5 volts.
- Claim 96. (Previously Submitted) The cleaning implement of claim 95, wherein said voltage is supplied for at least about 5 minutes of continuous pump operation.
- Claim 97. (Previously Submitted) The cleaning implement of claim 91, wherein said pump is configured to spray the cleaning liquid at a spray nozzle inlet pressure of 6 Kpa.
- Claim 98. (Previously Submitted) The cleaning implement of claim 91, wherein said pump has an efficiency of at least about 3%.
- Claim 99. (Previously Submitted) The cleaning implement of claim 91, wherein said motor has an efficiency of at least about 50%.
- Claim 100. (Previously Submitted) The cleaning implement of claim 86, wherein said liquid delivery system is configured to provide a spray pattern having a spray depth of at least about 20 cm.
- Claim 101. (Previously Submitted) The cleaning implement of claim 100, wherein said liquid delivery system is configured to provide a spray pattern having a spray width of at least about 20cm.
- Claim 102. (Previously Submitted) The cleaning implement of claim 86, wherein said handle has a deflection of less than about 15 mm.



Appl. No. 09/831,480 Atty. Docket No. 7368 Amdr. dated December 15, 2003 Reply to Office Action of June 18, 2003

Claim 103. (Currently Amended) A cleaning implement, comprising:

- a handle;
- a support head pivotally attached to said handle;
- a cleaning substrate removeably attached to the support head; and
- a hand-held liquid sprayer removeably attached to the cleaning implement for dispensing a liquid onto a surface to be cleaned wherein said hand-held liquid sprayer is stored within a cage attached to said handle.

Claim 104. (Cancelled)

Claim 105. (Previously Submitted) The cleaning implement of claim 103, wherein said hand-held liquid sprayer further comprises a cleaning liquid.

Claims 106-112 (Previously Cancelled)

Claim 113. (Currently Amended) The cleaning implement of claim 86, further comprising a scrubbing strip wherein said scrubbing strip is releasably attached to said support head.

Claim 114. (Currently Amended) The cleaning implement of claim 113, wherein said support head includes a front, a rear and side edges and wherein said scrubbing strip is attached to one of said edges of said support head said mop head.

Claim 115. (New) The cleaning implement of claim 113 wherein said scrubbing strip comprises a material selected from the group consisting of nylon, polyester, polypropylene, abrasive material, and mixtures thereof

Claim 116. (New) The cleaning implement of claim 86 wherein said disposable cleaning substrate has t1200_absorbent capacity of at least about 10 g/g.

Claim 117. (New) The cleaning implement of claim 86 wherein said support head includes a front, a rear and side edges, wherein said liquid delivery system comprises a nozzle in fluid communication with a container and wherein said nozzle is connected to said implement such that said nozzle is adjacent said front edge of said support head.